A Summary of Rabies in Massachusetts, 2005 Massachusetts Department of Public Health

The following report summarizes data collected on animal specimens sent to the State Laboratory Institute for rabies testing in 2005. A cumulative report summarizing rabies testing results from 1992-2002 and an annual report for 2004 are available on the MPDH rabies website at www.state.ma.us/dph/cdc/epii/rabies/rabies.htm.

Number of Submissions and Positive Results by Species

In 2005, 3,388 specimens were submitted to the State Laboratory Institute (SLI) for rabies testing. Of these specimens, 329 tested positive for rabies. **Table 1** illustrates positive animals in 2005 by species. Skunks and raccoons accounted for 84% of all positive animals. The percentage of raccoons testing positive has increased since 2004. Enhanced surveillance of raccoons continued in Cape Cod throughout 2005. Barnstable County submitted 358 raccoons. One hundred and thirty (36%) of these raccoons tested positive.

Table 1. Number of Submissions, Positive Results, and Percent Positive by Species (sorted from highest to lowest by # of positive results), 2005					
Animal	Number Submitted	Number Positive	% Positive		
Raccoon	552	207	38%		
Skunk	313	69	22%		
Bat	709	33	5%		
Fox	68	11	16%		
Cat	999	4	<1%		
Woodchuck	47	2	5%		
Coyote	6	2	33%		
Otter	2	1	50%		
Dog	443	0	0%		
Other	249	0	0%		
Total	3388	329	10%		

Number of Submissions and Positive Results by Year

As **Table 2** shows, in 2005 there were more animals testing positive than in each of the previous 6 years. This continues to reflect increased surveillance for rabies in raccoons on Cape Cod.

Table 2. Number of Submissions, Positive Results, and Percent Positive by Year				
Year	Number Submitted	Number Positive	% Positive	
1992	1079	57	5%	
1993	3971	720	18%	
1994	4532	735	16%	
1995	3438	400	12%	
1996	3005	115	4%	
1997	3128	282	9%	
1998	3938	498	13%	
1999	3270	226	7%	
2000	3310	276	8%	
2001	3346	280	8%	
2002	3137	304	10%	
2003	2983	216	7%	
2004	3479	327	9%	
2005	3388	329	10%	
Total	46004	4765	10%	

Number of Submissions and Positive Results by Month

As **Table 3** shows, in 2005 the highest numbers of submissions occurred during June and August. The lowest numbers of submissions occurred in November and December.

Table 3. Number of Submissions, Positive Results, and Percent Positive by Month, 2005				
Month	Number Submitted	Number Positive	Percent Positive	
January	227	26	12%	
February	250	33	13%	
March	318	53	17%	
April	291	51	18%	
May	229	15	7%	
June	364	30	8%	
July	315	23	7%	
August	618	33	5%	
September	277	20	7%	
October	192	20	10%	
November	167	11	7%	
December	140	14	10%	
Total	3388	329	10%	

Number of Submissions and Positive Results by County

In 2005, each of the 14 counties in Massachusetts submitted at least one animal for rabies testing, and all counties, except Nantucket and Dukes, had at least one positive animal (See **Table 4** below). Barnstable County submitted the highest number of animals (n=609) and had the highest number of animals test positive (N=160). Submissions from Barnstable County were high due to continued enhanced surveillance for raccoon rabies after the detection of the first positive raccoon on Cape Cod in March 2004.

Table 4. Number of Submissions, Positive Results, and Percent Positive by County, 2005				
County	Number Submitted	Number Positive	Percent Positive	
Barnstable	609	160	26%	
Berkshire	75	13	17%	
Bristol	249	20	8%	
Dukes	6	0	0%	
Essex	337	12	4%	
Franklin	65	8	12%	
Hampden	181	6	3%	
Hampshire	58	3	5%	
Middlesex	519	42	8%	
Nantucket	3	0	0%	
Norfolk	388	20	5%	
Out of State	32	0	0%	
Plymouth	244	23	9%	
Suffolk	274	4	1.5%	
Unknown	3	0	0%	
Worcester	345	18	5%	
Total	3388	329	10%	